## PATENT COOPERATION TREATY

### **PCT**

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 666985C:MOB:RMC	FOR FURTHER ACTION	See Form PCT/IPEA/416			
International application No.	International filing date (day/month	/year) Priority date (day/month/year)			
PCT/AU2005/000142	4 February 2005	6 February 2004			
International Patent Classification (IPC) or	national classification and IPC				
Int. Cl.					
A61K 31/166 (2006.01) A61P 1/00 (2006.01) A61P 1/12 (2006.01) A61K 31/606 (2006.01) A61P 1/06 (2006.01) A61P 1/14 (2006.01)					
Applicant					
BORODY, Thomas Julius et al					
This report is the international prelimin	ary examination report, established by	y this International Preliminary Examining			
Authority under Article 35 and transmi					
2. This REPORT consists of a total of 3	sheets, including this cover sheet.				
3. This report is also accompanied by AN	NEXES, comprising:				
a. (sent to the applicant and to the	e International Bureau) a total of s	heets, as follows:			
sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).					
sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.					
b. (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)), containing a sequence listing and/or table related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).					
4. This report contains indications relation					
X Box No. I Basis of the repo	ort	•			
Box No. Il Priority					
Box No. III Non-establishme	ent of opinion with regard to novelty,	inventive step and industrial applicability			
Box No. IV Lack of unity of					
Box No. V  Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement					
l	phone.				
Box No. VII Certain defects	Box No. VII Certain defects in the international application				
Box No. VIII Certain observations on the international application					
Date of submission of the demand  Date of completion of this report					
6 September 2005		1 I January 2006			
Name and mailing address of the IPBA/AU		Authorized Officer			
AUSTRALIAN PATENT OFFICE					
PO BOX 200, WODEN ACT 2606, AUSTRA	ALIA Michael G	rieve ·			
E-mail address: pct@ipaustralia.gov.au Facsimile No. (02) 6285 3929		Telephone No. (02) 6283 2267			

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### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

PCT/AU2005/000142

Bo	No. I Basis of the report				
1.	With regard to the language, this report is based on:				
	X The international application in the language in which it was filed				
	A translation of the international application into translation furnished for the purposes of:				
	international search (under Rules 12.3(a) and 23.1 (b))				
	publication of the international application (under Rule 12.4(a))				
	international preliminary examination (Rules 55.2(a) and/or 55.3(a))				
2.	With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):				
	X the international application as originally filed/furnished				
	the description:				
1	pages as originally filed/furnished				
	pages* received by this Authority on with the letter of				
	pages* received by this Authority on with the letter of				
	the claims:				
	pages as originally filed/furnished				
	pages* as amended (together with any statement) under Article 19				
	pages* received by this Authority on with the letter of pages* received by this Authority on with the letter of				
	the drawings:				
	pages as originally filed/furnished				
	pages* received by this Authority on with the letter of				
	pages* received by this Authority on with the letter of				
1	a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.				
3.	The amendments have resulted in the cancellation of:				
	the description, pages				
	the claims, Nos.				
1	the drawings, sheets/figs				
	the sequence listing (specify):				
	any table(s) related to the sequence listing (specify):				
4.	4. This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).				
	the description, pages				
	the claims, Nos.				
	the drawings, sheets/figs				
	the sequence listing (specify):				
	any table(s) related to the sequence listing (specify):				
	* If item 4 applies, some or all of those sheets may be marked "superseded."				

#### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/AU2005/000142

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
	citations and explanations supporting such statement

creations and expandations supporting such statement			
1. 5	Statement		
	Novelty (N)	Claims 1 to 13	YES
		Claims	NO
	Inventive step (IS)	Claims 1 to 13	YES
		Claims	NO
	Industrial applicability (IA)	Claims 1 to 13	YES
		Claims	NO

### 2. Citations and explanations (Rule 70.7)

D1: AU-A-87301/91

D2: WO 1992/016206A

D3: WO 1992/016214A

D4: Drugs & Aging Vol.19 No.5 (2002) pages 355-363

D5: Alimentary Pharmacology & Therapeutics Vol.6 No.1 (1992) pages 51-59

D6: Drug Safety Vol.23 No.5 (2000) pages 429-448

#### NOVELTY (N)

Claims 1 to 13 are considered to meet the criteria set out in PCT Article 33(2) as possessing novelty over the disclosure of documents D1 to D3. It is noted that document D1 discloses the use of salicylic acid derivatives (of which balsalazide is a known example) in the treatment of non-inflammatory and non-infectious bowel disorders such as irritable bowel syndrome, constipation, non-ulcer dyspepsia, and diverticular disease. Similarly, documents D2 and D3 disclose the use of 5-ASA compounds (of which balsalazide is, again, a known example) in the treatment of irritable bowel syndrome – diarrheal phase or Type (IBS-D). These documents, however, neither disclose nor suggest that balsalazide is unexpectedly far more powerful in treating the above-mentioned bowel disorders when compared to other 5-ASA compounds such as mesalazine.

As a result, the matter of the present Claims 1 to 13 is considered to be novel.

Documents D4 to D6 are merely considered to define the general state of the art, in that balsalazide is known to be effective in the treatment of irritable bowel disease (as opposed to the related, but distinct, irritable bowel syndrome).

#### INVENTIVE STEP (IS)

Claims 1 to 13 - see the comments under novelty above.